

IN THE CLAIMS:

Claims 14 through 55 were previously cancelled. Claims 1, 8, 9, and 10 have been amended herein. All of the pending claims are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

Listing of Claims:

1. (Currently amended) A method of forming a probe card for use in the testing of a semiconductor device comprising:
providing a substrate having a first surface, a second surface, and an aperture therethrough;
disposing a plurality of conductive traces adjacent at least one of the first surface and the second surface;
providing a plurality of probe elements in electrical communication with the plurality of conductive traces, at least a first one of the plurality of probe elements configured for supplying a test signal, and at least a second one of the plurality of probe elements configured for receiving a test signal, the plurality of probe elements having a portion thereof located on the first surface of the substrate, having a portion thereof extending through ~~an~~ the aperture in the substrate, and having a portion thereof located on the second surface of the substrate; and
providing a plurality of fuse elements in respective electrical communication with at least some of the plurality of conductive traces, at least some of the plurality of fuse elements disposed immediately adjacent ~~the~~ at at least one of the first surface and the second surface, the at least some of said the plurality of fuse elements comprising at least two types of fuses of an active fuse element, a passive fuse element, a self-resetting fuse element, a repairable fuse element, and a replaceable fuse element, each fuse element of the plurality of fuse elements for limiting the current level thereof to one of an absolute maximum current level for the probe card without substantial damage thereto and an

absolute current level for use in the testing of a semiconductor device without substantial damage thereto.

2. (Previously presented) The method of claim 1, wherein the providing a plurality of fuse elements comprises providing a fuse element of the plurality of fuse elements in respective electrical communication with substantially each of the plurality of conductive traces.

3. (Previously presented) The method of claim 1, wherein the providing a plurality of fuse elements comprises providing at least one fuse element of the plurality of fuse elements configured to be replaceable or repairable after being tripped.

4. (Original) The method of claim 3, wherein the at least one fuse element of the plurality of fuse elements is formed of a material selected from the group consisting of titanium tungsten, aluminum, platinum silicide, copper, nichrome, doped polysilicon, metal silicide, and alloys of any thereof.

5. (Previously presented) The method of claim 3, wherein the providing a plurality of fuse elements comprises forming at least some of the plurality of fuse elements using a deposition process.

6. (Original) The method of claim 3, further comprising constructing at least some of the plurality of conductive traces and at least some of the plurality of fuse elements at substantially the same time and by a single deposition process.

7. (Previously presented) The method of claim 3, further comprising providing a plurality of test contacts adjacent the at least one of the first surface and the second surface of the substrate, at least some of the plurality of test contacts in electrical communication with respective conductive traces of the plurality of conductive traces, and further comprising forming each of the plurality of conductive traces, the plurality of fuse elements, and the plurality of test contacts of the same materials.

8. (Currently amended) The method of claim 1, wherein ~~said~~ the providing a plurality of fuse elements comprises inserting at least one of the plurality of fuse elements in through-hole portions configured in the at least one of the first surface and the second surface of the substrate.

9. (Currently amended) The method of claim 1, wherein ~~said~~ the providing a plurality of fuse elements comprises providing at least one of the plurality of fuse elements configured as a dual in-line pin header fuse.

10. (Currently amended) The method of claim 1, wherein ~~said~~ the providing a plurality of fuse elements comprises providing at least one of the plurality of fuse elements configured as a dual in-line socket fuse.

11. (Previously presented) The method of claim 1, wherein at least one fuse element of the plurality of fuse elements is configured to be self-resetting after being tripped.

12. (Previously presented) The method of claim 11, wherein the at least one fuse element is configured as a PPTC fuse.

13. (Previously presented) The method of claim 11, wherein the at least one fuse element is configured as a bimetallic switch.

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14.-55. (Cancelled)